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From: Merritt, Steven

Sent: Tue 8/11/2015 5:45:58 PM

Subject: Background and SOW for Gold King Mine Task Order

This is from the ERRS work plan for the Gold King Mine work background and scope of work. Tenses suck, but feel free to work from here...

The Gold King Mine near Silverton, Colorado is a historic gold mine at approximately 11,300' elevation. The mine has a continuous discharge of acidic mine drainage that is a significant contributor of manganese, zinc, copper, and cadmium into the Cement Creek drainage of the Animas River watershed. The Gold King Mine has not had maintenance of the mine workings since 1991, and the workings have been inaccessible since 1995 when the mine portal collapsed. This condition has likely caused impounding of water behind the collapse. In addition, other collapses within the workings may have occurred creating additional water impounding conditions. Conditions may exist that could result in a blow-out of the blockages and cause a release of large volumes of contaminated mine waters and sediment from inside the mine, which contain concentrated heavy metals. The recent flow measurements since 2014 have been approximately 30-75 gallons per minute.

It is proposed to re-open the Gold King Mine portal and workings to investigate the conditions to assess the on-going releases. This will require the incremental de-watering and removal of blockages to prevent blowouts. The work is intended to take place in late Summer or Fall, 2015. In addition, the secondary purpose of the work is to attempt to identify and characterize specific water flows into the mine and evaluate potential means to mitigate those flows if possible.

The project work includes improving site access, grading the top of the waste dump into a work area, directing mine discharge to the pond at the Red and Bonita work site, establishing a water treatment system, removing the material covering the adit, installing a new portal structure, and rehabilitating the adit as directed by the OSC. Upon completion of the activities the site will be stabilitzed with the discharge solely directed to its original drainage. The temporary water treatment operations will be managed by START.

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